RANCHO SANTA ANA BOTANIC GARDEN

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PINUS REMORATA
SANTA CRUZ ISLAND PINE

Prepared
by
RANCHO SANTA ANA BOTANIC GARDEN
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NATIVE PLANTS OF CALIFORNIA

Santa Ana Canyon
Orange County
California

PINUS REMORATA
SANTA CRUZ ISLAND PINE

Pinaceae — Pine Family

Slender tree 60 to 70 ft. high; trunk seldom over 18 in. in diam., the bark dark brown, furrowed. Foliage dark green, needles borne 2 (rarely 3) in a fascicle, 3 to 5 in. long. Staminate cones about $\frac{3}{4}$ in. long, $\frac{1}{4}$ in. thick, produced in abundance near the tips of the terminal and lateral branches, often 150 aggregated for 10 to 12 in. along a shoot. Pistillate cones produced in whorls of 3 to 7, above the staminate, and with often five whorls to a branch per season. During the first season the pistillate cones grow to about 1 in. long by $\frac{3}{4}$ in. broad, are green except for the terminal brown portion of each umbo, and assume a position at right angles to the branch. Cones mature the second fall, are 3 to 4 in. long by $1\frac{1}{2}$ to 2 in. in diam., nearly symmetrical, each scale with a weak spine. The cones remain on the trees for many years, often becoming buried in the wood, prickles weather away and the surface becomes a dull gray; seeds black with a stout wing. Cotyledons 5 to 7.

The genus Pinus (the classical Latin name) consists of over 100 species widely distributed in the northern hemisphere. California has about 20 kinds, several of which are valuable lumber trees, while others are prized horticulturals.

The Santa Cruz Island Pine has only recently been given the recognition it deserves because of its distinctive botanical features. It was long confused with Pinus radiata binata, of Guadalupe Isl., Mex., a species with very different cones. In 1930, Prof. Herbert Mason of the University of California, concluded that the Santa Cruz Island Pine was a distinct species and proposed the name Pinus remorata (the species name in reference to the fact that the tree is a relic of past times). Fossil specimens are known from the Pleistocene age of Santa Cruz Isl. and from the mainland at Carpinteria, indicating that the tree once had a wider distribution.

On Santa Cruz Island Pinus remorata is an abundant tree forming extensive forests where it is associated with the Bishop Pine (P. muricata). The two pines are similar in size and general appearance, but the cones are very different. Bishop Pine cones are asymmetrical and deflexed on the branches, while in P. remorata the cones are symmetrical and borne at nearly right angles to the branch. P. remorata is also known from the adjacent Santa Rosa Island and from Cedros Island, Baja California.

Rumors of the occurrence of this pine in the Bishop Pine forests near Lompoc, Santa Barbara County are of interest, for if the species still persists on the mainland that is the most likely spot for it.

Pinus remorata begins to bear cones when about 4 years old and since they are produced in whorls of 3 to 7 and as many as 5 whorls per season per branch many old trees have thousands of cones. Growth of the young trees is exceedingly rapid, many trees having been observed on Santa Cruz Island to have made from 5 to 8 ft. of growth per year, thus making this species one of the fastest, if not the fastest growing, of all pines.

Although there are a few cultivated trees of the Santa Cruz Island Pine elsewhere in California, the trees in the Garden constitute the only large planting. This planting cosists of about 240 trees grown from seed obtained on Santa Cruz Island in 1932. Many of these trees are now 30 ft. in height and have produced cones since the fourth season. The trees are especially attractive during the spring when the staminate cones of a rich light tan stand out like candles on the branches. Since there are only two needles per fascicle the foliage of this tree is not so dense as the Monterey Pine. This feature is of some interest in that plants such as Azaleas and Rhododendrons which require filtered sunlight should do well under this pine.

Propagation of the Santa Cruz Island Pine is as easy as for any pine. The seeds should be planted in outside seed beds in the fall and covered with screen. They will germinate in early spring and if not too crowded should be left for two seasons. Seedlings of that age will range in height from 1 to 2 ft. and can be transplanted bare root without difficulty. By this method a good root system will be obtained. If it is necessary to put the trees in containers, the one-year old seedlings should be placed in 5-gallon cans for a year.

Unless especially wanted as a specimen tree the Santa Cruz Island Pine should not be planted in the hot interior valleys of California, for it is used to the damp air of the coast and would probably be short lived. Like most other pines it should not be planted in low, poorly drained spots.

The Sana Cruz Island Pine is probably not yet available from nurserymen.

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Of The Native Plants of California.

Established 1927

In Memory of John W. Bixby

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Purpose: A scientific institution devoted to the growth and study of the native plants of California for their botanical, horticultural and popular features.

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MAIL ADDRESS

R. F. D., Anaheim, California

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